the box

PA202A

full-range speaker

th•mann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section gives an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – suspended load.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used in a sound reinforcement system. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

CAUTION!

Possible hearing damage

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

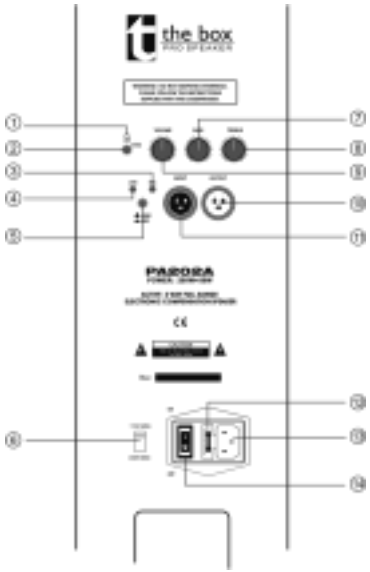
Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

3 Operating elements



1	**CLIP** This LED lights up if distortion occurs due to excessive input level.
2	**LOW CUT @ 120 Hz** Press this button to attenuate the frequencies below 120 Hz. This will reduce the transmission of impact noise and increase the lifetime of the woofer.
3	**MIC** Indicator for an incoming microphone signal.
4	**LINE** Indicator for an incoming line signal.

5	**LINE/MIC** This switch lets you toggle the input sensitivity for microphone or line level signals. For safety reasons this switch needs to be pressed deeply with a pen-like object, until it clicks into position. Press this switch down when connecting audio signals with microphone level to the INPUT socket. Release the switch when connecting line level signals.
6	**115 V / 230 V** Mains voltage selector. Make sure this selector is set correctly for the actual supply voltage at the operating location. Use this switch only when the device is switched off!
7	**BASS control** Bass tone control. Increase the low frequencies by rotating this knob clockwise and decrease them by rotating counter-clockwise.
8	**TREBLE control** Treble tone control. Increase the high frequencies by rotating this knob clockwise and decrease them by rotating counter-clockwise.

9	**VOLUME control** Increase the volume by rotating this knob clockwise and decrease the volume by rotating it counter-clockwise. Attention: first please adjust the volume to minimum before switching the unit on or making connections. Then adjust the appropriate volume.
10	**OUTPUT socket** If required, you can connect the line input of further active monitors to this line output.
11	**INPUT socket** Connect the input signal here.
12	**Mains fuse** If this fuse blows, you first have to disconnect the device from the mains. Then replace the broken fuse by a new one with same specifications.

13	**Mains power supply connector** Make sure that the voltage selector (6) is in the position that matches with the actual supply voltage available for operation, **BEFORE** you connect the mains power here.
14	**ON/OFF** Power ON/OFF switch.

4 Installation

Unpack and check carefully there is no transportation damage before using the unit.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.

CAUTION!

Risk of injury due to heavy weight

Due to the heavy weight of the device, at least two persons are required for transport and installation.

NOTICE!

Possible property damage by magnetic fields

Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

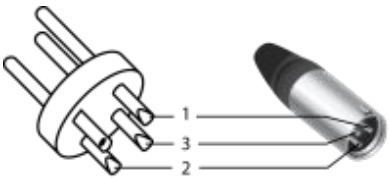
4.1 Pin assignment

You can use XLR connectors with either balanced or unbalanced wiring.

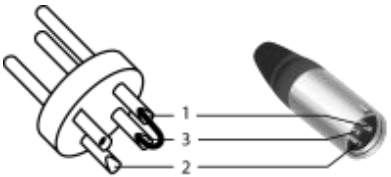
XLR connection for signal in and outputs

XLR mounting sockets are provided for signal inputs. XLR mounting plugs are provided for signal outputs. Drawings and descriptions explain the pin assignment.

Balanced wiring:



1	Ground, shielding
2	Positive signal (+)
3	Negative signal (–)



Unbalanced wiring:

1	Ground, shielding
2	Signal
3	Bridged with Pin 1

4.2 Tips on speaker positioning

We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. Often tripod mounting is a good way to maximise dispersion and range.

Always use high grade cable to connect your equipment. Otherwise you won't reach maximum sound quality.

For optimum results both impedance and power handling of the speakers must match the requirements of the amplifier. Always follow the technical specifications of the speakers! The overall impedance of the connected loudspeakers must not deceed the minimum output impedance of the amp. The power handling of the speakers should be above the amp's output power.

5 Technical specifications

Mains voltage	AC 115 V~, 50/60 Hz, AC 230 V~ 50/60 Hz
System	2-way full range active speaker with built-in crossover
Cabinet material	Polypropylene, trapezoid
Cabinet colour	Black
Driver quantity	1 × 12" (woofer), 1 × 1,4" tweeter
Tweeter dispersion (H x V)	55° × 55°
Frequency response	50 Hz - 18 kHz (-3 dB)
Max SPL (1 m))	120 dB (free field)
Level adjustment	±12 dB (10 kHz) - treble ±12 dB (100 Hz) - bass
Output power	200 W (woofer) + 50 W (tweeter)
Distortion	Line - 0.02 %, mic - 0.04 %

Load impedance	Tweeter - 8 Ω, woofer - 8 Ω
Input impedance	Balanced: 20 kΩ, unbalanced: 10 kΩ
Connectors	XLR input / output
Dimensions (W x D x H)	417 × 382 × 620 mm
Packing dimensions (W x D x H)	465 × 435 × 680 mm
Net weight	21.0 kg / pc.
Gross weight	23.2 kg / pc.

6 Cleaning and care

Cleaning plastic housing Do not use aggressive cleaners. Wipe the casing only with a slightly damp cloth.

7 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

Disposal of your old device

This device is subject to the European directive 2002/96/EC.

Do not dispose the device with your normal household waste.

Dispose this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.